XXXVI. Descriptions of new Genera and Species of Heterocerous Lepidoptera from Japan.* By A. G. Butler, F.L.S., F.Z.S., &c.

[Read November 2nd, 1881.]

PYRALES AND MICROS.

HYPENIDÆ.

141. Hypena rivuligera, n. s.

Fuliginous-brown; wings with a marginal series of linear black dots; a testaceous line at the base of the fringe, which is also spotted externally with pale yellow; primaries darker than secondaries, crossed from costa almost to inner margin by a very irregular lilacine subbasal line; two parallel, very irregularly-sinuated discal lilacine lines; costal area irrorated at intervals with whity brown scales; under surface paler fuliginous-brown; fringe spotted with blackish, and traversed by a dusky line; primaries with greyish white external area; expanse of wings, 1 inch 2 lines.

Tokei (Fenton).

Allied to the Indian H. lacessalis of Walker.

142. Gisira hercules, n. s.

Pale fuliginous-brown, with faint cupreous reflections; wings with the usual undulated outer margin; fringe grey, with a whity-brown undulated line at its base; a submarginal series of black dots; primaries with a broad transverse belt scarcely paler than the ground colour just before the middle, bounded on each side by a duskyedged distinctly paler line, the outer line interrupted by the reniform spot, which is pale, ill-defined internally, but black-edged externally; a scarcely perceptible discal series of pale spots, half-way between which and the outer margin is an irregularly-sinuated macular black

^{*} Concluded from p. 426, ante.

line limiting the external border, which is slightly paler than the ground colour; secondaries crossed by two ill-defined dusky angulated discal stripes; under surface whity brown; fringe and submarginal dots as above; primaries crossed near the base by a diffused greyish band, an ill-defined line followed by a stripe of the same colour across the middle, and a diffused subangulated discal band; secondaries with a grey-edged lunate spot at the end of the cell, and an arched grey central line; expanse of wings, 2 inches 1 line.

Tokei (Fenton).

HERMINIIDÆ.

143. Rivula subrosea, n. s.

Has the general aspect of an Acidalia; white, sparsely speckled with dark brown; wings above with dull rosy external borders terminating in a ferruginous marginal line; a submarginal series of pale-edged black spots; fringe yellowish, traversed by two ferruginous lines; primaries crossed before the middle by an arched pale vellow stripe, and beyond the middle by a transverse stripe slightly elbowed towards the costa; both of these stripes are imperfectly edged with brown; between them is a black irregular spot representing the reniform spot; a black dot representing the orbicular spot is within the cell; the costal border from the second stripe to near the apex is spotted with brown; a slightly irregular discal series of black spots; secondaries with the rosy tint of the external area diffused over the greater part of the wing-surface; two ill-defined, brownish-edged pale discal lines; head and collar brown, thorax white, abdomen whity brown; wings below widely suffused with rosy ferruginous; internal areas pale creamy yellowish; a submarginal series of black dots; body below pale creamy vellowish; anterior coxæ slightly reddish; expanse of wings, 9 lines.

Tokei (Fenton).

The Bleptina dimissalis of Walker, the type of which was from Swan River, Australia, was obtained at Tokei by Mr. Fenton; it is allied to Hydrillodes subbasalis of Moore, and identical with Bocana metisalis, Wlk.

144. Locastra elegans, n. s.

Fuliginous-brown; wings with bronzy reflections; primaries with a broad central area slightly tinted with greenish in certain lights, bounded at basal fourth by a slightly oblique black line, enclosing two black discoidal spots, and bounded outwardly by an arched and elbowed black discal line at external third; a marginal series of black spots; fringe pale, with whitish basal line and dusky spots; secondaries pale, excepting along the apical border, the discoidal area opaline white; fringe whitish, traversed by a dusky stripe; anal tuft whity brown; under surface almost exactly as in L. amica; expanse of wings, 1 inch 4 lines.

Yokohama (Jonas).

This species is so much more elegant in shape than its congeners, that until lately I failed to discover its affinities, and consequently it remained undescribed; its position is between L. amica and L. inimica.

145. Saraca costinotata, n. s.

Pale olivaceous-brown; basal area of primaries, a broad band just beyond the middle, and an external border with undulated inner edge, slaty grey; a triangular snow-white costal spot at apical third followed by a minute white dot; fringe short, grey, with a whitish basal line; secondaries with the basal three-fifths and the external border slaty grey; under surface pale bronzy brown, with greyish opaline tints in certain lights; primaries with two white costal dots towards apex; expanse of wings, 1 inch 1 line.

Yokohama (H. Pryer).

Allied to S. trimantesalis (Egnasia trimantesalis, Wlk., which should be placed in Saraca).

146. Saraca subviolacea, n. s.

Greyish brown, with a faint violet gloss; wings with a slender pale-edged marginal black line; primaries with a slender abbreviated black line across the base of the costal border, a sinuous black stripe across the basal third, a rather broad elbowed black band, with sinuated

outer edge; just beyond the middle, a pyramidal subapical costal black patch separated from the angulated portion of the post-median band by a short oblique lilacine dash; the outer edge of this patch is minutely sinuated and very narrowly edged with whitish, its apex, which is necessarily directed downwards, is connected by means of a series of inconspicuous blackish dots with the inner margin; secondaries crossed just before the middle by a black-edged dusky band, a narrower sinuous band just beyond it across the disc; a small black dot at the end of the cell; primaries below olivaceous-brown, with ochreous costal border; edge of costal margin longitudinally streaked with black; internal area pale silvery greyish; fringe grey, with pale yellow basal line; two parallel transverse discal grey lines, the outer one bounded by a line of creamy yellowish scales; secondaries whity brown; a marginal series of very slender olivaceous lunate lines with whitish external edges; fringe dark grey; two discal lines as in the primaries; body below whitish in the centre; expanse of wings, 1 inch 3 lines.

Yokohama (H. Pryer).

147. Egnasia vasava, n. s.

Reminds one of Antigonus vasava (Hesperiida); primaries above with the basal fourth mouse-grey, crossed and bounded by two slender irregular white lines; immediately beyond is a very broad irregular belt, grey, with narrow internal and broad external olivaceous borders; discoidal spots inconspicuous, ferruginous; the outer border of the central belt is acutely angulated on the lower radial vein, and bounded externally by a white line and a squamose triangular white costal patch; a rather broad olivaceous discal band separated from an equally broad grey external border by a slender undulated whitish line; costal margin beyond the central belt alternately brown and white; a blackish-edged ferruginous stripe occupies the basal half of the fringe, which is otherwise white, interrupted at the angles of the wing by black-edged grey spots; secondaries with the basal third grey; a rather broad externally undulated black-bordered olivaceous band before the middle enclosing four conspicuous white spots at the end of the cell. three of which spots are larger than the fourth, and

form a triangle only separated by a slender Y-shaped black character; immediately beyond is a rather broad dentated black-edged grey band, its outer edging imperfect and formed by the confluence of a series of conical black spots edged externally with white; external area greyish olivaceous, inclining to reddish internally; fringe as in the primaries; body above grey; wings below altogether paler, greyer, irrorated with white, the markings ill-defined; a slender black marginal line, disco-cellulars indicated in black; body whitish; expanse of wings, 1 inch 1 line.

Yokohama (H. Pryer).

Most nearly allied to E. athemonalis and E. porphyrea.

148. Olybama japonica, n. s.

General aspect of O. thelephusalis; primaries above lilacine grey; basal half of costal border marked with three equidistant black spots, between the third of which and the inner margin is a broad diffused blackish brown band: a subapical white-edged zigzag blackish line from costal margin to upper radial vein; a black spot on inner margin close to external angle; a marginal series of black dots; fringe grey, with a slender white basal line: secondaries pale brownish grey; an externally white-edged diffused grey streak from anal angle to the middle of the disc; a slender black marginal line; fringe as in primaries; thorax lilacine grey; abdomen whitish, crossed by grey bands; under surface of wings pale sericeous-grey; a marginal series of black dots; fringe white; primaries with a grey-edged creamy costal patch towards apex; secondaries, when seen with a lens, white, minutely irrorated with grey; a black lunule at the end of the cell; an externo-discal series of subconfluent grey spots; body below sordid white; tarsi dark grey, banded with cream colour; expanse of wings, 11 lines.

Tokei (Fenton).

149. Meranda inconspicua, n. s.

Primaries above pale chocolate-colour; costal margin dotted with white; an oblique brown-edged whitish line from basal two-fifths of inner margin to the end of the cell, where there is an irregular slaty grey spot; a second

oblique line from external fourth of inner margin to costa near apex; the upper extremity of this line is washed with grey; fringe traversed by a snow-white line; secondaries whity brown, with diffused darker outer border; fringe with a slender yellowish basal line and a white line close to its outer edge; thorax above chocolate-colour; abdomen whity brown; under surface cream-coloured, the legs above and the borders of the wings washed with sandy yellow; primaries with white internal area; costa dotted with white; secondaries silvery white towards the abdominal area; costal area irrorated with testaceous, an indistinct discal line of the same colour; fringe of all the wings whitish, traversed by a grey stripe; expanse of wings, 9 lines.

Yokohama (H. Pryer).

ENNYCHIIDÆ.

150. Pyrausta chrysitis, n. s.

Wings above black-brown, with golden reflections; fringe stramineous, becoming blackish towards the anal angles; primaries with some ochreous atoms towards the base; a small oval ochreous spot just beyond the middle of the interno-median interspace, and a large almost diamond-shaped spot at the end of the cell; secondaries with an abbreviated central ochreous band; body blackish; abdomen with the edges of the segments and the anal tuft white; primaries below with the internobasal area silvery white, base yellow, secondaries with the band continued to the abdominal margin; all the wings with a slender whitish marginal line; pectus silvery; palpi and legs creamy white; venter grey, banded with white; expanse of wings, 9 lines.

Tokei (Fenton).

Nearly allied to *P. phanicealis*, of Europe, but smaller, darker, and more uniformly coloured.

151. Pyrausta unipunctata, n. s.

Dark purplish brown; primaries with a subapical costal ochreous spot or transverse dash; secondaries with the fringe slightly touched at the tips with white; primaries below with the subapical spot larger and paler than above; the interno-basal border white; pectus

pale brown, neck and legs whitish; expanse of wings, $8\frac{1}{2}$ lines.

Yokohama (H. Pryer).

Nearest to P. pygmæalis of Europe, but larger, the fringes not white, and the band wanting from the secondaries.

152. Ennychia diversa, n. s.

 \mathcal{F} . Very near to E, luctualis of Europe, as large as the female of that species; the white markings of a bluer tint, the spot on the primaries more elongated, cup-shaped, the band of secondaries broader and more distinctly rectangular externally; on the under surface the indistinctly greyish areas of E, luctualis are silvery white in the Japanese form; expanse of wings, 1 inch 1 line.

Hakodaté (H. Whitely)*.

I have long hesitated to name this insect on account of its close resemblance to the European species; there can, however, be very little doubt that it is distinct.

HYDROCAMPIDÆ.

153. Cataclysta midas, n. s.

Above silvery white; wings with black-edged bright ochreous bands; primaries with the costal border claycoloured almost to the third-fourth, imperfectly divided by whitish spots into three equal parts; an oblique interno-basal clay-coloured dash; the external two-thirds would be most intelligibly described as bright ochreous with black-edged silvery white markings as follows: a triangular spot at the end of the cell, an irregular angulated patch below it, a dot on each side of the latter upon the inner margin; an oblique abbreviated and slightly tapering band beyond the cell and a narrower tapering submarginal band or stripe; fringe silvery, traversed by a leaden-grey line; secondaries with a blackish-edged ochreous spot at the end of the cell and a falciform band of the same colours from the middle of the cell to the internal nervure: an abbreviated blackedged discal area irrorated with blackish scales and

^{*} Owing to a misprint this name is incorrectly spelt with an e in some of my earlier papers.

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bounded externally and at the extremities by a marginal ochreous band, on which are five conspicuous black spots speckled with plumbageous scales; fringe greyish, with a dark grey basal line; shoulders, tips of tegulæ, and a series of abdominal bands, pale brown; under surface somewhat as above, but the markings less defined; coxæ and femora brownish at the sides; knees and extremities of anterior tibiæ black; expanse of wings, 1 inch 2 lines.

Tokei (Fenton).

Nearest to C. dominalis of South India.

154. Paraponyx turbata, n. s.

Primaries with the basal two-thirds white mottled with brown, crossed at basal two-fifths by a slender black-edged dentate-sinuate white line, and bounded by a similar line; disc brown; a black-edged submarginal white line, abruptly sinuated just below the apex; external border dull ochreous; a slender black marginal line; fringe whity brown, traversed by a grey line; secondaries white, with a spot near the base of the abdominal border, a subbasal band, two convergent slender central lines, between which is a spot at the end of the cell, and a discal band smoky brown; external border and fringe as in primaries; body brown; under surface white; wings sordid, mottled with pale brown, a marginal series of white-edged black dots; expanse of wings, 10 lines.

Yokohama (H. Pryer).

One slightly-worn example is all that Mr. Pryer has sent of this very distinct species.

SPILOMELIDÆ.

155. Pagyda quadrilineata, n. s.

Allied to *P. amphisalis* (Botys amphisalis, Wlk.), with which it has been confounded, but larger and with four instead of five lines across the primaries; shining ochreous; wings with a slender brown marginal line, the fringe ochreous at base and traversed by a testaceous stripe, outer half of fringe white, tipped with grey on the secondaries; primaries crossed by four nearly straight and almost equidistant slightly convergent dark

testaceous lines, the third of which does not reach the inner margin; secondaries crossed by two oblique central parallel lines, a third abbreviated transverse line crossing the disc; costal area whitish; palpi, back of thorax, and margins of abdominal segments white; a black longitudinal spot on the last segment; under surface pale shining stramineous, the markings only visible through the texture of the wings; expanse of wings, 1 inch to 1 inch 2 lines.

Yokohama (Jonas); Tokei (Fenton).

Until I had seen a series of this species I supposed it to be a variety of *P. amphisalis*; the general appearance is similar, although in that insect (of which we have four examples) the five lines on the primaries are all carried across the wing, and the two last unite at their extremities so as to inclose a fusiform area.

BOTIDIDÆ.

156. Botyodes insignis, n. s.

3. Wings even more elongated and narrower than in B. ussurialis; greyish brown, with pale cupreous reflections; primaries with the centre of the costal border ochreous, two unequal subquadrate pale yellow spots confluent with the ochreous costal border; an extremely slender whitish marginal line; fringe traversed by a pale stripe; head and posterior margins of the abdominal segments yellow; wings below paler, whitish towards the base; body below pale buff, inner surface of femora pearly white; knees of anterior and middle pairs of legs black; tibiæ of anterior legs banded in the centre with grey; expanse of wings, 1 inch 6 lines.

Tokei (Fenton).

PSEUDEBULEA, n. g.

Aspect of *Ebulea*, but with a more robust body, thicker palpi and antennæ; the wings glossy and subopaline; anterior legs short and robust.

157. Pseudebulea jentoni, n. s.

Primaries above greyish brown, with a purplish gloss in certain lights; basal half irregularly spotted with pale yellow, scarcely darker than cream-colour, disco-cellulars

of the same colour, >-shaped; a large irregular patch or abbreviated band of pale yellow just beyond the cell, and confluent with a pale ochreous streak occupying the central third of the costal border; a subapical conical spot, ochreous upon the costal border, pale vellow below it; outer border and fringe irregularly pale stramineous; a marginal series of minute blackish dots; secondaries pale creamy yellow, opaline; a spot at the end of the cell, an irregular oblique subapical stripe; an abbreviated stripe, from the inner margin to the first median branch, the apex and a marginal line smoky brown; fringe traversed by a greyish line, blackish at anal angle; head and thorax smoky brown, crest, under surface of antennæ, and their outer half above, pale stramineous; abdomen grey, anal tuft cream-coloured; wings below paler and more pearly than above, markings partly obsolete, otherwise as above; body below white; legs pearly white; anterior coxe and femora banded with grey, anterior tibiæ with black; expanse of wings, 1 inch 2 lines.

Tokei (Fenton).

The position of this pretty little species is apparently next to the New World genus *Homophysa*.

158. Anemosa pryeri, n. s.

Pale bronze-brown, washed with grey; wings crossed by an arched discal black line, and with black fringe; primaries with the centre of costal border and the area between the cell and the discal line rust-red; a blackish arched line across the basal third and a small blackish disco-cellular lunule; primaries below shining greyish brown; costa and a broad externally black-edged arched band beyond the cell whity brown; secondaries sordid white, shining; an arched slender dusky discal line; body below and legs pearly white; expanse of wings, 9 lines.

Yokohama (H. Pryer).

The genus Anemosa is nearly allied to Mecyna, from which it chiefly differs in its more acuminate primaries and the greater distance between the first and second median branches of the secondaries; the three species hitherto recorded are from Australia, New Zealand, and the Hawaiian Islands.

ÆGERIIDÆ.

159. Sphecia rhynchioides, n. s.

Aspect of Rhynchium brunneum (an East Indian wasp); wings as in S. dasypodiformis, hyaline yellowish white; the veins and costa black, on the primaries with slender longitudinal red lines; the disco-cellulars of primaries red externally; internervular folds and a marginal series of spots continuous with them golden buff; fringe brown; secondaries with the fringe brown, spotted with white; head orange, subopaline, with black posterior margin; antennæ black, reddish at the tips; anterior half of thorax and tegulæ clothed with long appressed ochreous hair; collar and back of thorax purplish black, almost crossed behind by a transverse orange stripe; a second orange stripe along the posterior edge of the metathorax; abdomen with the two basal segments black, edged behind with orange, the three following segments dark orange edged with black, penultimate segment wholly orange; legs black, banded with dull ochreous; wings below with the veins and borders (excepting the costal border of primaries, which is purplish black) dull golden; fringe of secondaries purplish black; body below blackish, with lateral ochreous spots; expanse of wings, 1 inch 4 lines.

Tokei (Fenton).

This is one of the best imitations of a wasp that I have seen; when seen in profile the conjunction of the black collar with the ordinarily-formed blackish eye of the moth accurately copies the more elongated eye of the wasp.

GALLERIIDÆ.

Cataprosopus, n. g.

Allied to Lamacha and Murgisca; wings ample, geometriform, with obtusely angulated outer margins; secondaries with the apex prominent; costal vein of primaries below with a long fringe almost covering the discoidal cell; body moderately robust; palpi long and deflexed, tufted at the base, divergent; antennæ simple, rather short; genitalia prominent.

160. Cataprosopus monstrosus, n. s.

Whity brown, irrorated with black scales; wings crossed by an obtusely angulated slender black line parallel to the outer margin; fringe blackish; primaries with fuliginous costal border; an oblique black line across the basal third; discoidal spots small, blackish; a greyish nebula below the cell half-way between the two black lines; secondaries greyish towards the abdominal margin; thorax greyish; palpi fuliginous; under surface paler and more sericeous than the upper surface, the markings less distinct; primaries with no line at basal third; anterior tibie banded above with black; palpi pale below; expanse of wings, 1 inch 3 lines.

Tokei (Fenton).

CRAMBIDÆ.

161. Eromene expansa, n. s.

 \mathcal{F} , \mathfrak{P} . Closely allied to E. bella of Europe, but considerably larger; the wings broader in proportion; the primaries whiter, with the fringe alternately metallic-silver, embossed, and white; secondaries with the fringe of the same pale bronzy brown as the remainder of the surface; expanse of wings—male 9, female 13 lines.

Tokei (Fenton).

E. bella expands about 8 lines in the male and 9 in the female; the costal and inner margins of the primaries are also straight in that species, whereas in E. expansa they are distinctly convex; the male of the latter species, so far as can be judged from a rather rubbed example, seems to differ from that sex of E. bella, and from its own female, in having a simple orange stripe in place of the three stripes (orange and metallic silver) across the primaries.

162. Argyria candida, n. s.

Silvery white; primaries with convex metallic-silver fringe, showing in certain lights a whitish-bordered grey line; a slender orange marginal line, on which is a series of minute black dots; a 3-shaped gravel-brown marking across the apex; a very slender and widely arched externo-discal line of the same colour, elbowed upon the first median branch, and a slightly sinuated oblique

stripe just before the middle, angulated and acutely recurved upon the costal border; secondaries without markings, excepting a slender greyish line upon the fringe; thorax with a semicircular gravel-brown marking behind the head; primaries below pale bronze-brown, excepting the externo-discal area, which, however, is interrupted by a brown spot at apex; markings of the upper surface indistinct; fringe tarnished metallic-silvery; secondaries with an abbreviated brown subapical line; otherwise as above; legs brown; expanse of wings, 9 lines.

Tokei (Fenton).

Nearest to A. croceivittella (Urola croceivittella, Wlk.), from Rio Janeiro.

163. Apurima fulvosparsa, n. s.

Silvery white; primaries with a black dot at the inferior angle of the cell; external area of the wing sprinkled with ochreous scales, which, above the lower radial, form two convergent lines, the inner one sigmoidal, the outer one straight; apical margin slightly tinted with ochreous; under surface without markings; body cream-coloured; expanse of wings, 1 inch 1 line.

Tokei (Fenton).

TORTRICIDÆ.

164. Steganoptycha granitalis, n. s.

General appearance and coloration of S. nævana of Europe, but the white markings more sharply defined, all of them being bounded internally by black lines; ground colour of primaries whity brown, the second-fourth of costal area, a broad oblique belt from beyond the cell to the inner or dorsal margin, and the apical third silvery white, flecked here and there and edged internally with black; costa crossed by the usual short oblique black dashes; secondaries greyish brown; frons and apex of palpi snow-white; vertex of head black; back of head and thorax ochraceous; abdomen pale brown; under surface shining grey; expanse of wings, 7 lines.

Tokei (Fenton).

Apparently most nearly allied to S. fætorivorans from the Hawaiian Islands.

TINEIDÆ.

165. Nemotois aurifera, n. s.

Tinachma (Adela) fasciella, Motschulsky (nec fasciellus, Fabr.); Bull. Mosc. 1866, p. 39.

Allied to N. raddellus of Europe, about the same size and form, but the primaries golden, clouded towards the costa and on the disk with reddish cupreous, the costal border ultramarine-blue; a slightly sinuous bluish-bordered slender yellow transverse band just beyond the middle, and a large circular patch of pale yellow scales upon the disc, and rather nearer to the apex than the external angle; secondaries smoky brown, with a slight purplish gloss; wings below brown, shot with purple, and with a golden marginal line; band of primaries less prominent than above; internal border paler, with silvery marginal line; expanse of wings, 9 lines.

Yokohama (Jonas).

Also somewhat like Adela degecrella.

166. Nemotois paradisea, n. s.

Nearest to N. decisella; primaries sparkling brassy golden, crossed before the middle by a broad ochreous belt, bounded on each side by a metallic-silver band; base of costal border purplish; secondaries bronzy brown; head yellow, antennæ with the basal two-fifths black, the remainder sordid white; thorax plumbageous; abdomen pale shining brown; wings below bronzy brown; primaries purplish towards the costa, band of upper surface indistinct, shining like the rest of the wing, but yellowish white rather than ochreous; silver bands obsolete; secondaries with sordid whitish fringe; body below pale brown; palpi ochreous; anterior legs slightly cupreous; expanse of wings, 8 lines.

Tokei (Fenton).

This and N. decisella are rather broad-winged species; even more so than N. riolella.

HYPONOMEUTIDÆ?

Psecadioides, n.g.

Aspect and form of *Psecadia* (bipunctella); rather broader; neuration of primaries chiefly differing in the emission of the first subcostal branch near to the base instead of from the middle of the cell; secondaries with the disco-cellulars more transverse; owing to the greater breadth of the wings the discoidal cells are shortened; palpi more like those of *Ypsolophus*, longer and broader than in *Psecadia*, densely scaled, but less so than in *Ypsolophus*, and with shorter terminal joint; antennæ thick, with very robust basal joint.

But for the form of the wings, which is decidedly more like *Psecadia*, I should have placed this genus next to *Ypsolophus*, to which indeed it may have greater

affinities.

167. Psecadioides aspersus, n. s.

Primaries greyish brown, with greenish reflections, and spotted with black; costal border mottled with silvery white; an irregular oblique band across the basal fourth, a triangular patch at external angle, and a rather irregular external border confluent with the external patch silvery white; a marginal series of black dots; secondaries bronze-brown; head and thorax white; centre of prothorax in front and shoulders bronze-brown; abdomen bronze-brown; under surface brown; pectus silvery, with the legs brown; abdomen sordid white, brownish at anal extremity; expanse of wings, 1 inch.

Tokei (Fenton).

GELECHIIDÆ.

168. Eretmocera ignipicta, n. s.

Purplish black; primaries with a very broad carmine subcostal streak from near the base to the outer margin, where it meets a narrow stripe of the same colour, which runs round the margin half-way to the base; secondaries dark bronzy brown; head shining, smooth, plumbageous; thorax showing fiery cupreous points in certain lights; abdomen with extremely narrow orange posterior margins to the segments; under surface bronzy brown; primaries cupreous towards the base, purplish

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towards the apex, and with purple costal margin; pectus, as seen between the large coxæ, brilliant opaline; legs slightly opaline along the centre of the inferior margins; the long setose antennæ, and the spines and bristles upon the legs, black; expanse of wings, 8 lines.

Tokei (Fenton).

A very beautiful little species of this singular genus.

PTEROPHORIDÆ.

169. Aciptilus vilis, n. s.

Size of A. xanthodactylus; wings above whity brown, the lobes of primaries minutely irrorated with black; the fringes spotted with white, inferior fringe of upper lobe almost wholly white; costal border snow-white; two black-brown marginal spots beyond the middle of the costa; a >-shaped black marking with white outer border at the end of the cell; body snow-white; under surface pale shining whity brown; fringes varied with white; a white-edged brown >-shaped marking at the end of each discoidal cell; primaries with narrow white costal margin; blackish spots as above; body white; expanse of wings, 10 lines.

Tokei (Fenton).

A very distinct species of this somewhat unsatisfactory group of moths; the affinities of the *Pterophoridæ* seem to have been long a problem to Entomologists, their narrow bodies and long spiny legs being somewhat similar in general appearance to those of the *Pyrales*, whilst the palpi are, as a rule, extremely short; the larvæ are hairy, like those of tropical *Zygænidæ*, but the

pupa is suspended without a cocoon.

For any Lepidopterist, without evidence, to place the Pterophoridæ (not Alucitidæ, which, I believe, are not really allied to them) near the Zygænidæ would probably be regarded as almost criminal by Entomologists generally; and, although the tropical American genera Horama and Mastigocera seem to exhibit some affinities to the Pterophoridæ, and the venation of the secondaries in males of Androcharta somewhat reminds one of them, I still feel that more positive evidence is necessary before locating them there myself; although, unless some happier suggestion can be made, I fear that this is where they will eventually have to settle down. The Alucitidæ seem to me more nearly allied to the Deltoids.

SUPPLEMENTARY SPECIES.

LITHOSIIDÆ.

170. Æmene minuta, n. s.

Smoky grey, with blackish veins; primaries with a small black reniform spot at the end of the cell; a broad whitish transverse belt before the middle; vertex of head whitish; under surface of wings uniformly smoky grey; legs whitish internally; venter whity brown; expanse of wings, 7 lines.

Yokohama (H. Pryer).

ARCTIIDÆ.

171. Pharetra leucoptera, n. s.

Primaries above nearly as in P. rumicis of Europe; secondaries creamy white, the base suffused with smoky brown; abdominal border brown; external border broad, black-brown, with bronze reflections, its inner edge zigzag; a white marginal spot on the interno-median interspace; fringe white, sericeous; body almost as in P. rumicis, but more robust; the thorax grey, streaked with black; abdomen smoky brown; primaries below grevish brown, the costal border densely irrorated with pale buff, and spotted beyond the middle with blackish; a spot at the end of the cell, and the external border slightly darker than the ground colour; inner border white; fringe white, speckled with black; secondaries snow-white; costal area speckled with blackish; a marginal blackish border nearly as above; fringe white; body sordid white; tarsi black, banded with white; expanse of wings, 1 inch 10 lines.

Yokohama (H. Pryer).

Apparently allied to "Acronycta" lutea of Bremer.

LIMACODIDÆ.

172. Aphendala sericea, n. s.

Pale sordid sandy brown or stone-colour, sericeous; primaries crossed in the middle by a very slightly angulated oblique blackish line, which unites close to costa with a widely-arched discal line running to the first median branch, where it turns abruptly inwards for a

short distance, then bends again and runs obliquely to inner margin parallel to the inner line; fringe dusky; secondaries with creamy yellowish abdominal border; fringe tipped with blackish; body distinctly greyer than the wings; under surface sordid sandy yellowish; wings sericeous; expanse of wings, 1 inch 2 lines.

Tokei (Fenton).

DREPANULIDÆ.

173. Drepana acuta, n. s.

Nearly allied to *D. curvatula* of Europe, but much larger, and of a more uniform redder colour above; below with the lines less distinct; otherwise similar; expanse of wings, 1 inch 6—9 lines.

Tokei (Fenton).

Our examples of D, curvatula measure 1 inch 2—4 lines in expanse.

NOTODONTIDÆ.

Platychasma, n. g.

Allied to Lophopteryx, but differing in having the costal margin of the primaries, from the base almost to the middle, projecting (like a shelf) beyond the true margin of the wing; the projecting lobe of the inner margin nearer to the base, as in Microdonta, the outer margin very feebly dentated; the subcostal branches of the secondaries forming a longer fork.

174. Platychasma virgo, n. s.

White, serieeous; primaries with a black dot at basal sixth of costa, a second in the cell just beyond the middle, a black <-shaped marking on the disco-cellulars; a large gravel-yellow patch, crossed by an abbreviated black dentate-sinuate line near base of inner margin, and extending into the projecting lobe, and an oblique gravel-yellow band, diffused internally and bounded externally by a slender zigzag black line, crossing the wing beyond the middle; secondaries slightly sordid towards outer margin; under surface white; expanse of wings, 1 inch 5 lines.

Tokei (Fenton).

175. Phalera fuscescens, n. s.

Allied to P. assimilis of Bremer (P. ningpoana of Felder); but much larger, with broader wings, and a much broader cream-coloured apical patch on the primaries, a distinct white spot at the end of the cell on the same wings; primaries above with the costal half grey, excepting at apex, where there is a large irregular creamcoloured patch bounded internally by a blackish lunulate and angular line, which crosses the disc, and externally by an irregularly dentated line; upon this patch is a transverse series of ochreous spots; internal half silvery white, irrorated with grey, and a spot of the same is at the end of the cell; an irregular black line across the basal fourth: a submarginal series of <-shaped black markings, those towards apex bounding two small ochraceous spots; a slender black marginal line; fringe ferruginous, speckled with white; a dusky patch close to anal angle; secondaries pale fuliginous; fringe ferruginous, spotted with white between the veins; body as in P. bucephala: under surface sordid cream-colour; primaries widely washed with grey, which is darkest on the discoidal area; secondaries with a stripe across the middle and an anal patch and diffused submarginal streak grey; outer margins of all the wings dusky, and the fringe ferruginous, spotted with white; palpi ferruginous, blackish at the base; legs fuliginous, tarsi banded with white; expanse of wings, 2 inches 7 lines.

Yokohama (H. Pryer).

This species and *P. assimilis* may at once be distinguished from the European forms by their smoky secondaries; in this respect they approach the Indian type of *Phalera*.

ENNOMIDÆ.

176. Calcaritis oberthuerii, n. s.

Whity brown, speckled with olive-brown and black; primaries with the base of costal border and an angular stripe across the basal fourth black or dark brown; discocellulars black; two very irregular undulated blackish or dark brown stripes beyond the middle, beyond which the disc is white; an oval black patch in the centre of the second median interspace, interrupting the second post-median stripe; external border blackish or olivaceous-brown, interrupted at apex and on second median interspace,

and spotted with white; secondaries crossed at basal and external thirds by more or less defined undulated blackish or brown lines, between which is a series of more or less defined blackish spots; a white discal band; external border blackish or brown, more or less interrupted; body with a double dorsal series of blackish spots; thorax greyish; under surface altogether paler than the upper surface; expanse of wings, 1 inch 5—8 lines.

Tokei (Fenton).

I have named this singular species after the author of the genus.

BOARMIIDÆ.

177. Tephrosia noctivolans, n. s.

Pale smoky brown, speckled with black; primaries crossed in the middle by a broad white band, speckled with black towards costa, bounded externally by a dentatesinuate black line, and crossed in the middle by a similar line (which is however interrupted by a semicircular black-edged spot at the end of the cell); basal area spotted with black; external area crossed by two somewhat confluent undulated black stripes; the outer stripe bordered with grey, which, however, is replaced by white on the median interspaces and towards apex; secondaries with the basal two-thirds white, densely speckled with black, and limited externally by the outer of two parallel central dentate-sinuate black lines; a pale submarginal dentate-sinuate line with dusky inner border, and corresponding with the outer black stripe on the external area of the primaries, but far less distinct; all the wings with a slender black marginal line, and a more or less defined blackish stripe on the fringe; thorax paler than the abdomen, the latter with whitish hind margins to the segments; wings below creamy white, speckled with grey, especially at the end of the cell and on the external area of the primaries; a bisinuated grey discal band on these wings; body pale buff, speckled with grey; expanse of wings, 1 inch 5 lines.

Tokei (Fenton).

Somewhat resembles *Boarmia contiguata*, Moore; it is an unusually clearly-marked species.

FIDONIIDÆ.

178. Bupalus mirandus, n. s.

Black; primaries with a pyriform interno-basal spot; a large triangular central patch, a discal oblique series of very unequal patches and dots, and an oblique dash at centre of outer margin, snow-white; costal margin speckled with ochreous; secondaries greyish towards the base; a narrow transverse band just before the middle; a broader discal band parallel to it, and an oblique dash at centre of outer margin, snow-white; head in front ochreous; collar grey, vellow on the shoulders; abdominal segments margined with white; wings below with markings as above, but the black portions more or less irrorated with pale yellow, especially on the costal borders; body below white, irrorated with grey, especially on the venter, which consequently appears to be grey, banded with white; palpi ochreous; tibiæ and tarsi vellowish; expanse of wings, 1 inch 5 lines.

Yokohama (H. Pryer).

LIGIIDÆ.

Macrochthonia, n.g.

Primaries elongated, with slightly convex margins; outer margin sigmoidal, with the apex acute; secondaries narrow, longest in costal, shortest in abdominal margin; second and third median and radial veinlets emitted close together at the extremity of the median vein; thorax robust; palpi erect, projecting a little above the head; antennæ very long, extending to third fifth of costal margin, their basal three-fifths broadly pectinated; legs long and very thick, the tibiæ woolly; abdomen rather slender, extending a little beyond the anal angle of the secondaries.

179. Macrochthonia fervens, n.s.

Primaries above red-brown, with a slight pink tinge; crossed in the middle by an oblique darker black-edged band; between the central band and the base are two slightly divergent black lines, angulated upon the costal margin; a submarginal zigzag series of black dashes; secondaries pale greyish, with the costal area and fringes white; the external border slightly reddish; head and

thorax red-brown; metathorax white; antennæ greyish brown; abdomen grey, with paler anal segments; under surface creamy white, reddish at the borders; primaries with the discoidal area widely suffused with grey; fringe greyish; secondaries with the abdominal half uniformly creamy white, not reddish at its borders; coxæ and femora clothed with snow-white hair; tibiæ brown above, white, with a black lateral line, below; tarsi brown, with white bands above, white below; expanse of wings, 1 inch 5 lines.

Tokei (Fenton).